



Harvard Pilgrim
Health Care



City of Boston: Annual Review of Experience PY 2012

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Outline of Presentation

- Who are City of Boston members, and how healthy are they?
- What were the costs to care for these members?
 - Review focuses on **policy year (PY) 2012**: July 2011 to June 2012
- What types of services did members use?
- Prevention, wellness, and condition management
- Observations and opportunities



Who are City of Boston members, and how healthy are they?

Key Demographic Metrics

- Membership has changed since last year
 - City of Chelsea moved to its own account as of May 2012 (over 2,450 members)
 - Medicare-eligible members moved to Enhance starting July 2012 (currently 2,900 members)
- HMO/POS membership as of September 2012: 36,800
- Without the retiree population, City of Boston members are now younger than the HPHC Plan and Municipal/Government Industry average
- Compared to Plan, slightly more members 40+ and fewer under 20
 - Compared to Industry, fewer members 40+ and more under 20

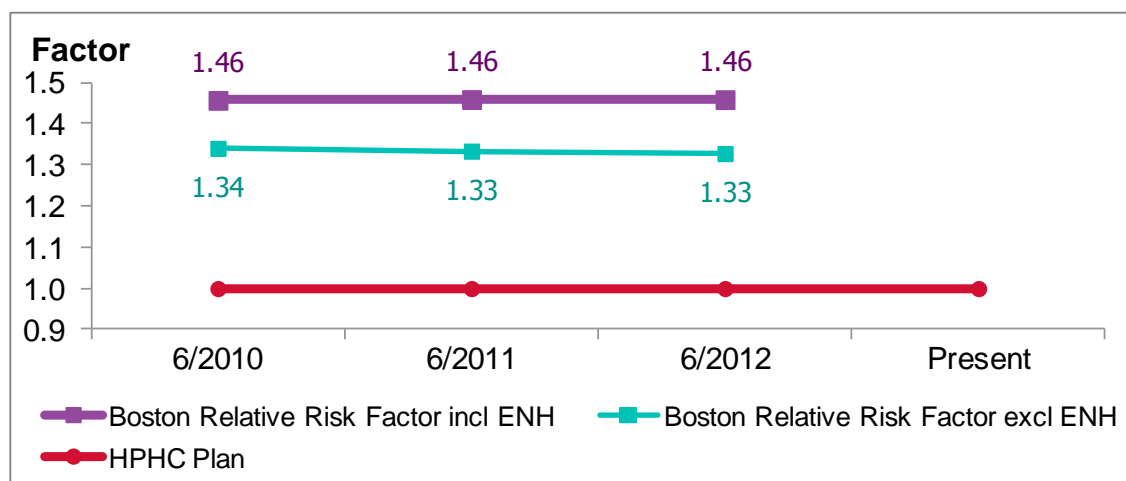
	Boston Sep 11	Boston Sep 12	HPHC Plan	Industry
Members	42,088	36,800	--	--
Subscribers	19,008	16,060	--	--
Average Age	38.0	35.7	36.7	37.2
Age/Sex Factor	1.21	1.11	1.00	1.15
Average Contract Size	2.2	2.3	2.2	2.3
Average Family Size*	3.2	3.4	3.3	3.3
% Female Members	52.4%	52.1%	51.6%	52.1%
% Women of Childbearing Age**	17.3%	18.3%	19.0%	16.9%
% Individual Contracts	45.0%	45.4%	49.1%	42.1%
Members 40 or Older	50.0%	46.3%	45.0%	50.8%
Members 19 or Younger	24.8%	26.5%	27.7%	25.4%

* Average Family Size (AFS) includes all non-individual contracts.

** Women of Childbearing Age defined here as ages 20 to 44.

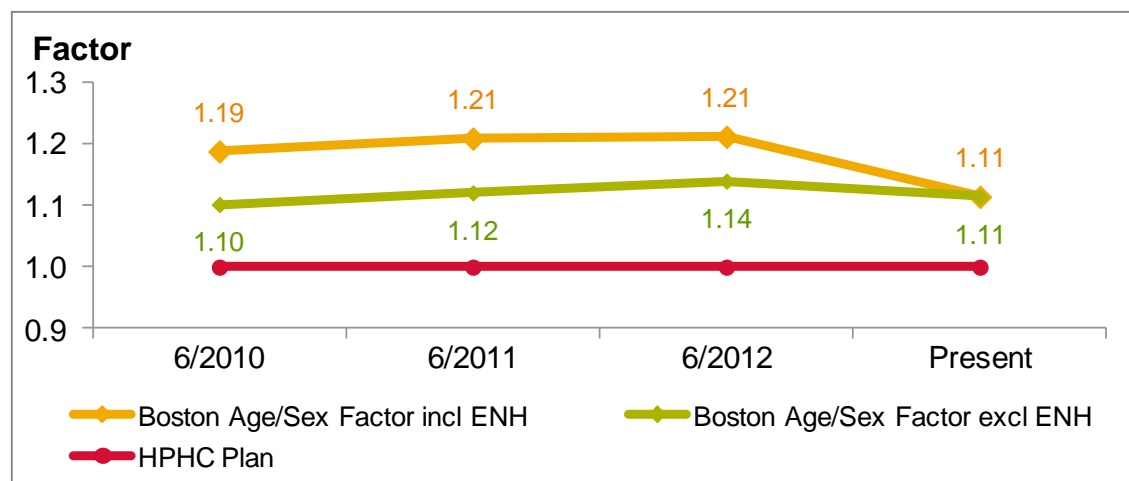
Relative Risk Factors

- Medicare-eligible members helped drive high risk factors
- Relative risk is based solely on claims and diagnoses
- Risk is very high, but is 13 points lower without Medicare Enhance members
- Factors suggest that we'd expect to see claims costs roughly 33% to 46% higher than the Plan benchmark



Demographic (Age/Sex) Factors

- Again, Medicare-eligibles helped drive high risk factors
- Age/sex factor has increased, but is 7 points lower without Medicare Enhance members
- Factors suggest that we'd expect to see claims costs roughly 11% to 21% higher than the Plan benchmark
- Members are relatively unhealthy for their age (*relative risk is higher than age/sex factor*)



Key Diagnostic Groupings

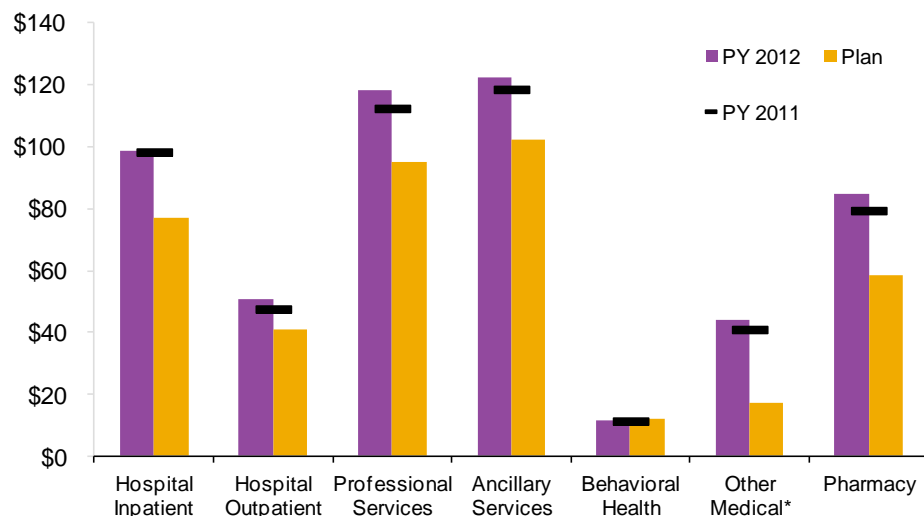
- Cancers were the most costly key diagnostic group again in PY 2012.
- Lifestyle choices (such as nutrition, exercise, and quitting smoking) could have a positive impact on several of these diagnostic groups *(marked with red arrow)*
- High cost claimants (HCCs) were 1.4% of members, but 26.3% of claims costs

Key Diagnostic Groups	High Cost Claimants	PMPM Costs				
		Prior	Current	Variance v. Prior	HPHC Plan	Variance v. Plan
Cancers	116	\$30.88	\$36.16	17.1%	\$29.47	22.7%
Injury & poisoning (including fractures & burns)	42	\$28.14	\$26.12	-7.2%	\$22.53	15.9%
→ Digestive system conditions (including cirrhosis and appendicitis)	36	\$26.36	\$25.51	-3.2%	\$24.03	6.1%
Pregnancy & birth	15	\$25.40	\$25.14	-1.0%	\$23.37	7.5%
→ Cardiac conditions (including heart attacks and high blood pressure)	57	\$21.39	\$22.75	6.4%	\$18.24	24.7%
→ Arthritis (including rheumatoid arthritis)	40	\$12.95	\$15.58	20.3%	\$13.10	18.9%
General exams & screenings	0	\$12.41	\$13.19	6.3%	\$15.81	-16.6%
Back disorders	15	\$10.27	\$10.38	1.0%	\$9.61	8.0%
Non-cancerous tumors	11	\$7.43	\$7.64	2.8%	\$6.74	13.3%
Renal failure (including ESRD)	27	\$6.86	\$6.28	-8.4%	\$2.46	155.5%
→ Diabetes	9	\$5.35	\$5.15	-3.7%	\$3.65	41.3%
Mental health & substance abuse conditions	4	\$4.66	\$5.09	9.2%	\$8.39	-39.3%
Congenital anomalies	12	\$4.00	\$3.81	-4.7%	\$3.83	-0.4%
Fertility assistance	5	\$2.73	\$2.83	3.7%	\$3.00	-5.7%
Pneumonia, influenza, and other respiratory infections	6	\$2.57	\$2.30	-10.3%	\$1.63	41.4%
Asthma	1	\$2.41	\$2.29	-5.0%	\$1.63	40.8%
→ COPD	6	\$2.31	\$1.83	-20.8%	\$1.11	65.5%
MS, Parkinson's, and other degenerative nervous system conditions	16	\$1.66	\$1.72	3.2%	\$1.36	26.5%
Total Key Diagnostic Groups		\$207.80	\$213.78	2.9%	\$189.96	12.5%



What were the costs to care for these members?

Claims Costs: Total and by service area



Notes:

Ancillary Services include lab, x-ray, other diagnostic procedures, chemotherapy, radiation therapy, PT/OT/ST, ambulance, DME, VNA, home health, hospice, etc.

Other Medical includes capitation, which does not apply to self-insured accounts.

- Total employer-paid claims costs in PY 2012: **\$262.9 million**
- Cost per member per month (PMPM): **\$531 (\$510 adjusted—no Enhance)**
 - Cost is 31% higher than Plan average of \$404 (26% adjusted—no Enhance)
 - Most service area costs are at least 25% higher than Plan average
- Compared to PY 2011, costs PMPM increased in all areas
 - But all cost increases were 7% or less
- Except for Hospital Inpatient, higher utilization **and** higher average unit cost (cost per service or admission) drove cost increases
 - Hospital Inpatient had a decrease in inpatient admissions

Claims Costs: Top Providers

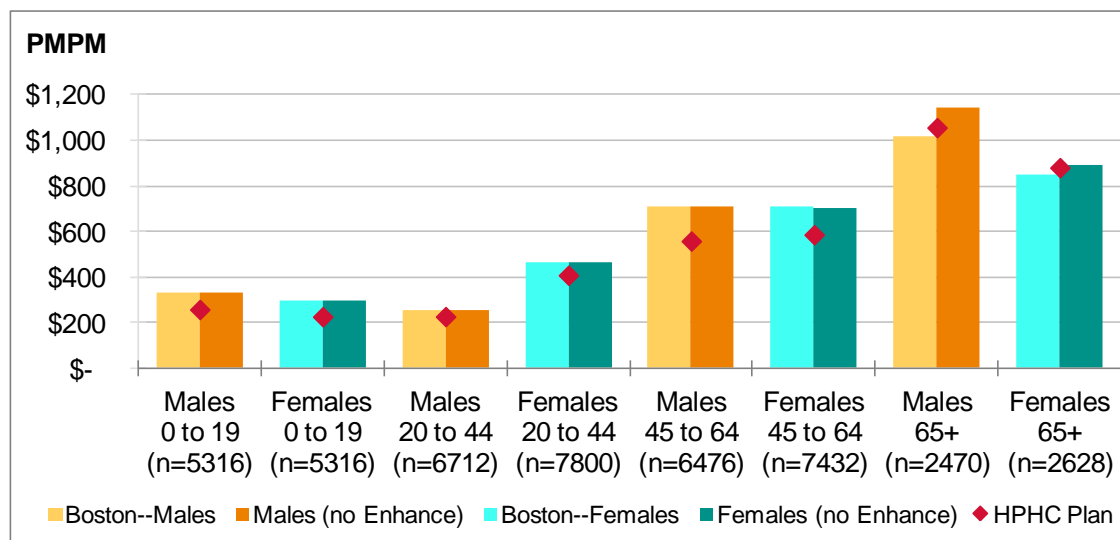
- Many City employees live in Boston, so it's no surprise that 8 of the top 10 providers are Boston academic medical centers
- Top 10 account for 38% of total provider cost
 - 66% of inpatient admissions
 - 61% of outpatient facility services (ER, day surgery, etc.)
 - 24% of ancillary services such as lab, x-ray, chemotherapy, etc.

Provider	Tier*	PY 2011 % Medical Costs	PY 2012 Amount Paid	PY 2012 % Medical Costs	HPHC Plan % Medical Costs
BRIGHAM AND WOMEN'S HOSP	3	8.9%	\$15,187,674	7.9%	4.6%
MASS GENERAL HOSPITAL	3	6.5%	\$12,716,356	6.6%	4.2%
BETH ISRAEL DEACONESS	2	7.0%	\$12,454,614	6.5%	3.8%
CHILDRENS HOSPITAL	3	3.5%	\$6,032,848	3.1%	2.8%
BRIGHAM AND WOMEN'S/FAULKNER	2	2.8%	\$5,257,995	2.7%	0.7%
DANA-FARBER CANCER INST	2	2.1%	\$4,723,475	2.5%	1.5%
TUFTS MEDICAL CENTER	2	2.1%	\$4,473,194	2.3%	1.0%
SOUTH SHORE HOSPITAL	3	2.1%	\$4,305,093	2.2%	1.7%
BOSTON MEDICAL CENTER	1	1.9%	\$4,056,318	2.1%	0.9%
STEWARD ST ELIZABETH'S	2	2.0%	\$4,050,725	2.1%	0.6%
Total Top Ten Providers		38.9%	\$73,258,291	38.2%	21.6%
All Other Providers		61.1%	\$118,464,809	61.8%	78.4%
Total		100.0%	\$191,723,100	100.0%	100.0%

* Tiers based on Hospital Prefer product tiering. Using national quality benchmarks, as well as plan medical expense information, Harvard Pilgrim placed affiliated hospitals in Tier 1, Tier 2 or Tier 3.

Claims Costs by Age Range and Sex

- For many of the age brackets, the costs PMPM are similar, regardless of whether the Medicare-eligible members' experience is included
 - Very few members in the lower age brackets moved to Enhance
- We see some variances in the 65+ age bracket



Cost Sharing

- Member cost sharing lags far behind the Plan average
 - Members pay 1.6% of medical costs (5.6 percentage points below Plan)
 - Members pay 10.6% of pharmacy costs (10.1 percentage points below Plan)
- Costs shown below include Plan and member liability

	PY 2011	PY 2012	Variance v. Prior	HPHC Plan	Variance v. Plan
Total Costs PMPM	\$526.45	\$548.13	4.1%	\$437.21	25.4%
Medical Cost Share	1.6%	1.6%	+0.0	7.2%	-5.6
Pharmacy Cost Share	11.5%	10.6%	-0.9	20.7%	-10.1
Total Percent Paid by Members	3.3%	3.1%	-0.1	9.2%	-6.1

- ***Looking ahead:*** Copayment changes were implemented in July 2012; we expect to see increases in member cost sharing for PY 2013 and beyond



What types of services did members use?

Key Utilization Metrics


- **Hospital Inpatient:** Fewer total admits compared to prior year, but more OB admits
 - Admission rate higher than Plan benchmark
- **Outpatient:** Rates similar to prior year
 - Compared to Plan average, lower rate of preventive visits; higher rate of medical care visits; higher ER use
- **Pharmacy:** Increased utilization; decreased use of generics; drop in mail order use
 - Compared to Plan average, higher utilization; similar use of generics; lower use of mail order

Category	Metric	PY 2011	PY 2012	Variance v. Prior	HPHC Plan	Variance v. Plan
Hospital Inpatient						
OB Admissions	frequency per 1,000	11.5	12.6	9.0%	12.0	5.2%
Total Admissions	frequency per 1,000	96.2	94.4	-1.8%	69.9	35.1%
Outpatient						
Office Visits for Well Care	visits per 1,000	708.8	730.6	3.1%	738.5	-1.1%
Office Visits for Medical Care	visits per 1,000	4,235.6	4,346.0	2.6%	3,628.1	19.8%
Emergency Room	visits per 1,000	277.1	279.4	0.8%	211.8	31.9%
Average ER Visits per ER Claimant	visits	1.4	1.4	1.0%	1.3	7.4%
Pharmacy						
Pharmacy Utilization	scripts/member/year	17.6	17.7	0.1%	12.7	38.8%
Mail Order Utilization	% of total prescriptions	9.5%	8.9%	-0.6	14.6%	-5.7
Generic/Tier 1 Utilization	% of total prescriptions	76.4%	76.1%	-0.3	76.1%	-0.0

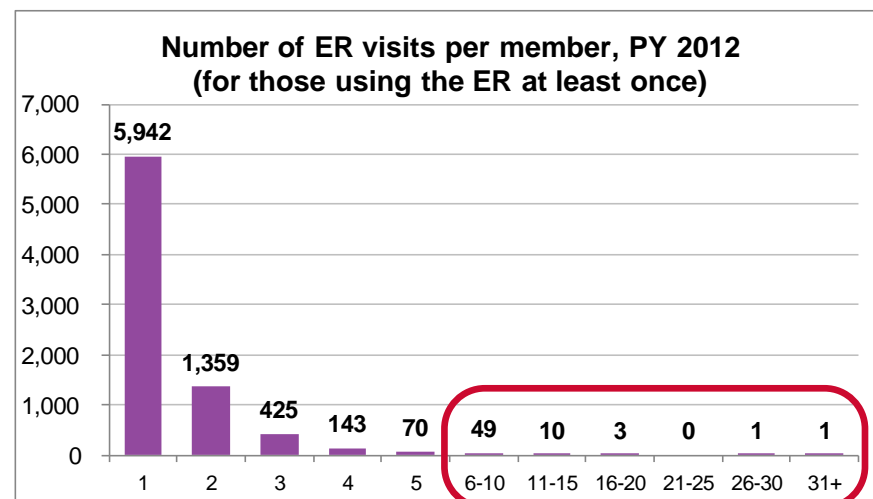
- We expect to see changes in utilization with Medicare eligibles moving to Enhance
 - Somewhat lower inpatient admission rate; possibly higher ER visit rate, offset by lower utilization due to higher ER copay as of July 2012; lower rate of scripts per member per year

Utilization: Detail on ER use

- Based on NYU Center for Health and Public Service Research criteria:
 - Non-emergent:** immediate medical care not required within 12 hours.
 - Emergent—Primary Care Treatable:** treatment required within 12 hours, but could have been treated by PCP.
 - Emergent—ER Care Needed—Preventable/Avoidable:** ER care required, but the condition was potentially preventable/avoidable (flare-ups of asthma, diabetes, etc.).
 - Emergent—ER Care Needed—Not Preventable/Avoidable:** ER care required and physician treatment could not have prevented the condition (trauma, appendicitis, heart attack, etc.).
- City of Boston had over \$4 million in ER costs in PY 2012. The ER use patterns are fairly similar to the HPHC Plan benchmark, but with more dollars in “Non-emergent” and fewer in “ER needed, not avoidable”.
- Some “frequent flyers” are helping to drive up the rate of ER visits.



Category	City of Boston	HPHC Plan
Non-emergent	\$821,835 20%	18%
Emergent, PCP treatable	\$795,709 19%	19%
ER needed, preventable	\$210,800 5%	5%
ER needed, not avoidable	\$1,787,158 44%	47%
Unclassified	\$469,354 11%	11%



Prescription Drugs: Top Therapeutic Classes

- Percentage of total cost for top therapeutic classes is similar to the Plan average in most cases
 - **Miscellaneous Therapeutic Agents** is an exception—lower than benchmark
 - This category is for newer, expensive drugs to treat conditions such as multiple sclerosis and rheumatoid arthritis

Therapeutic Class	Generally Prescribed for	PY 2011	PY 2012	HPHC Plan
		% Rx Costs	Amount Paid	% Rx Costs
Miscellaneous Therapeutic Agents	Miscellaneous medical conditions	10.1%	\$4,406,992	10.5%
HMG-CoA Reductase Inhibitors	High blood-cholesterol level	4.3%	\$2,123,122	5.1%
Insulins	Diabetes mellitus (Treat High Blood Sugar)	4.0%	\$1,813,962	4.3%
Antiretroviral Agents	Treat Viral Infections	4.5%	\$1,780,693	4.2%
Antipsychotic Agents	Treat a variety of psychological conditions	3.9%	\$1,535,815	3.7%
Antineoplastic Agents	Cancer	2.2%	\$1,513,038	3.6%
Proton-Pump Inhibitors	Treat gastrointestinal disorders	3.9%	\$1,277,616	3.0%
Antidepressants	Depression	4.0%	\$1,276,776	3.0%
Adrenals	Corticosteroid for respiratory conditions	3.7%	\$1,198,197	2.9%
Opiate Agonists	Moderate to severe pain ((Pain Relief)	2.8%	\$998,244	2.4%
Total Top Ten Therapeutic Classes		43.4%	\$17,924,454	42.7%
All Other Therapeutic Classes		56.6%	\$24,034,007	57.3%
Total		100.0%	\$41,958,461	100.0%

Prescription Drugs: Top Drugs by Name

- Eight of top 10 are from the top therapeutic classes
- Lipitor no longer on Top 10 list; generic version, Atorvastatin Calcium, is #9
- Percentage of costs for these drugs is fairly consistent

Drug	Therapeutic Class	Generally Prescribed For	PY 2011 % Rx Costs	PY 2012 Amount Paid	PY 2012 % Rx Costs	HPHC Plan % Rx Costs
Crestor	HMG-CoA Reductase Inhibitors	High blood-cholesterol level	1.9%	\$1,033,770	2.5%	1.7%
Nexium	Proton-Pump Inhibitors	Treat gastrointestinal disorders	1.8%	\$907,865	2.2%	2.0%
Enbrel	Miscellaneous Therapeutic Agents	Miscellaneous medical conditions	1.6%	\$857,437	2.0%	3.0%
Copaxone	Miscellaneous Therapeutic Agents	Miscellaneous medical conditions	1.8%	\$818,867	2.0%	2.6%
Abilify	Antipsychotic Agents	Treat a variety of psychological conditions	1.7%	\$777,988	1.9%	2.0%
Humira	Miscellaneous Therapeutic Agents	Miscellaneous medical conditions	1.4%	\$699,852	1.7%	2.7%
Singular	Leukotriene Modifiers	Control/manage asthma and allergic conditions	1.2%	\$566,985	1.4%	1.5%
Plavix	Platelet-aggregation Inhibitors	Reduce risk of thrombotic events	1.5%	\$565,046	1.3%	1.1%
Atorvastatin Calcium	HMG-CoA Reductase Inhibitors	High blood-cholesterol level	0.0%	\$547,369	1.3%	0.2%
Revmid	Antineoplastic Agents	Cancer	1.1%	\$542,312	1.3%	0.4%
Total Top Ten Drugs			14.1%	\$7,317,491	17.4%	17.2%
All Other Drugs			85.9%	\$34,640,971	82.6%	82.8%
Total			100.0%	\$41,958,461	100.0%	100.0%

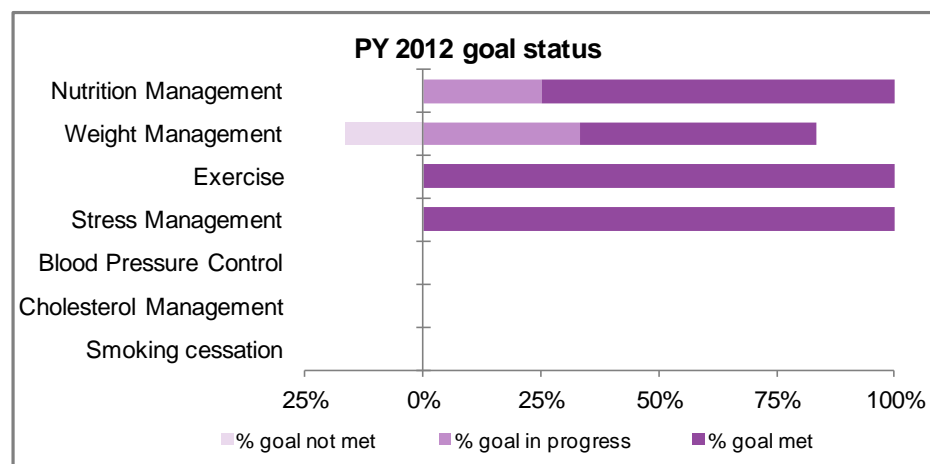
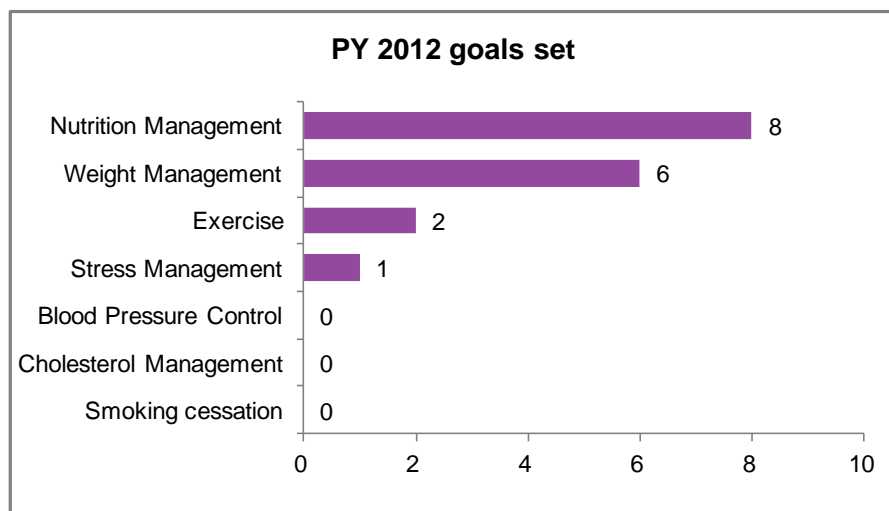


Harvard Pilgrim
Health Care

**What about prevention, wellness, and
condition management?**

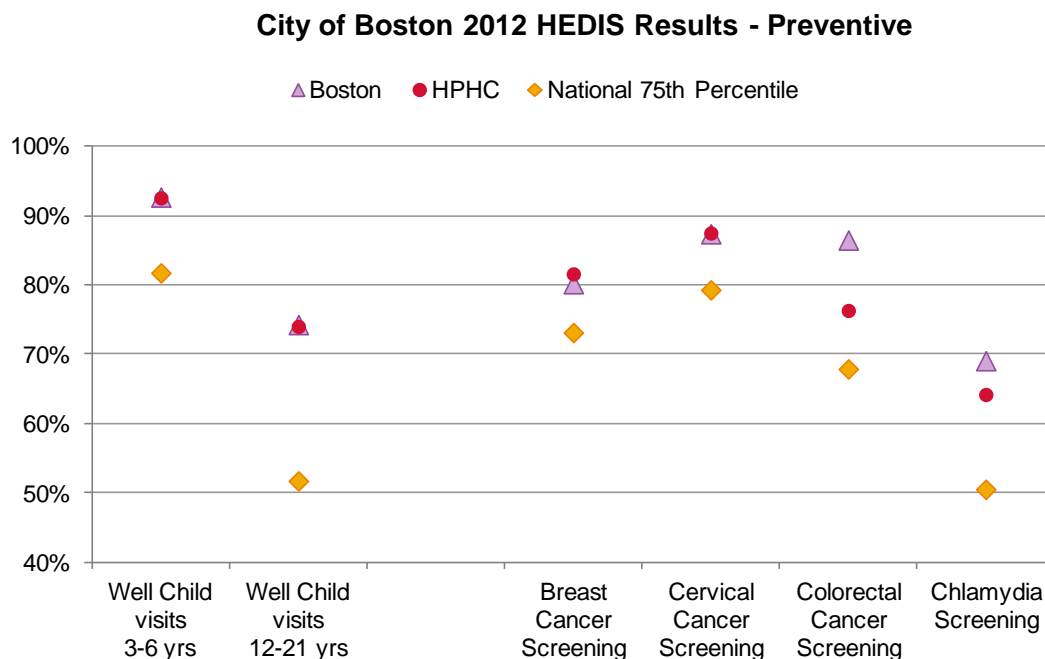
Staying Healthy: Lifestyle management

- 19 members took the Health Questionnaire (HQ)
 - Of those, 14 requested coaching
 - 7 of the 14 ultimately engaged with a health coach
 - Those 7 members set 17 goals
- Most goals are either completed or in progress



Staying Healthy: Prevention and Screening

- The Healthcare Effectiveness Data and Information Set (HEDIS) includes measures for preventive and curative care, and is one way to assess quality
- The graph below shows how City of Boston compares to the national 75th percentile benchmarks for **preventive** care
 - All of the City's rates are better than the national benchmark



Living with Illness: Chronic conditions

- The majority of members identified with common chronic conditions had asthma or diabetes
- However, those with cardiac conditions or COPD had a higher percentage of members considered high-risk
- Participation rates were similar to or better than Plan average, and far higher than national average

	Total		Low-Moderate Risk		High Risk								
	Total	% of total			% of total			Outreach	Active/				
Condition	identified	members	Identified	Enrolled	Identified	identified	Enrolled	in process	participating	Completed	Active or Completed	HPHC Plan*	National Average**
Asthma	3,638	8.2%	3,463	3,186	175	4.8%	175	4 (2%)	7 (4%)	43 (25%)	50 (29%)	30%	5%
Diabetes	3,132	7.1%	3,026	2,784	106	3.4%	106	2 (2%)	9 (8%)	35 (33%)	44 (42%)	36%	12-16%
Cardiac	664	1.5%	580	534	84	12.7%	84	3 (4%)	8 (10%)	35 (42%)	43 (51%)	52%	9-12%/20-30%
COPD	854	1.9%	765	704	89	10.4%	89	2 (2%)	22 (25%)	38 (43%)	60 (67%)	53%	16-20%

*HPHC book of business 1/1/12-6/30/12 based on NCQA 2011 standards: participation equals a two-way interaction in which the member receives self management support or health education.

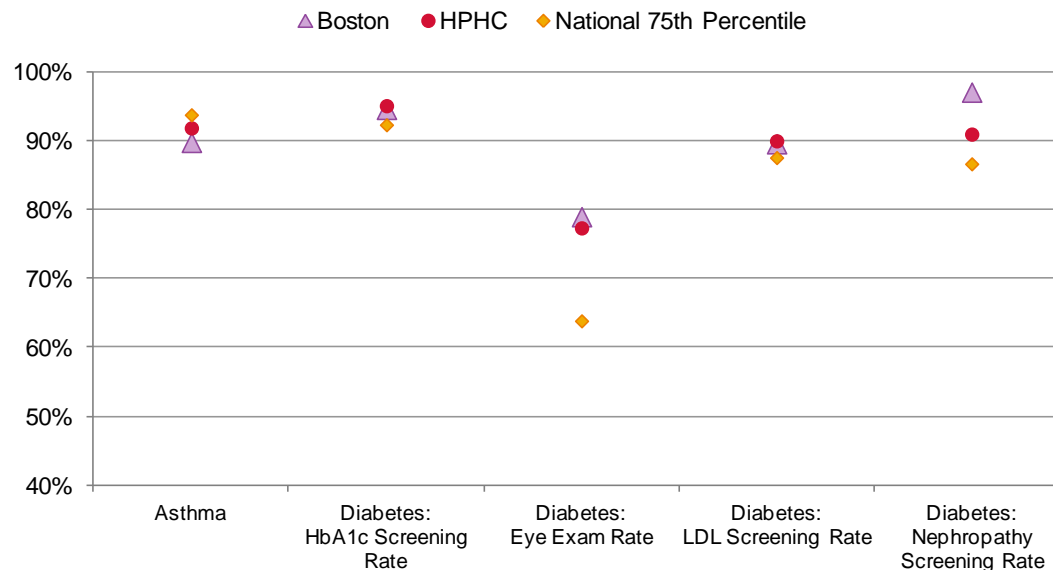
**Disease Management Purchasing Consortium National Database; rates for Cardiac are for CAD and CHF, respectively.

Living with Illness:

Chronic condition monitoring

- The graph below shows how City of Boston compares to the Harvard Pilgrim and national 75th percentile benchmarks for HEDIS **chronic condition** monitoring
 - City of Boston better than Harvard Pilgrim benchmark for two diabetes measures
 - Apart from asthma, all of the City's rates are better than the national benchmark
 - Asthma prevalence is higher in the Northeast than the rest of the country

City of Boston 2012 HEDIS Results - Chronic Conditions



Living with Illness: High-risk management

- Members were enrolled in programs for...
 - Oncology
 - Rare diseases (such as multiple sclerosis, lupus, rheumatoid arthritis, Parkinson's disease, sickle cell disease, etc.)
 - Chronic kidney disease
 - Complex chronic (a program for members dealing with multiple conditions)
- Levels of participation varied widely
 - Chronic Kidney had the highest participation rate (72% active or completed); Rare Diseases had the lowest (27% active or completed)
 - Apart from Rare Diseases, participation rates were at or higher than Plan average

Program	Total		High Risk					
	Total identified	% of total members	Enrolled	Outreach in process	Active/participating	Completed	Active or Completed	HPHC Plan*
Oncology	243	0.5%	243	8 (3%)	13 (5%)	99 (41%)	112 (46%)	49%
Rare Diseases	270	0.6%	270	107 (40%)	44 (16%)	28 (10%)	72 (27%)	59%
Chronic Kidney	65	0.1%	65	2 (3%)	20 (31%)	27 (42%)	47 (72%)	54%
Complex Chronic	254	0.6%	254	1 (0%)	59 (23%)	92 (36%)	151 (59%)	N/A

*HPHC book of business 1/1/12-6/30/12 based on NCQA 2011 standards: participation equals a two-way interaction in which the member receives self management support or health education.



Observations and Opportunities

Observations and Opportunities (1 of 2)

Findings: *Plan Design*

- While no changes were made in plan design for the policy year just ended, new copays began as of July 1, 2012 for the current policy year.
- Because plan design did not change and medical costs continued to increase, member cost sharing decreased slightly. However, decreased inpatient utilization helped keep costs lower than they might have been otherwise.

Observations

- The new plan designs include tiered PCP/specialist office visit copays, higher ER copay, and higher Rx copays.
- With the new copayments in July 2012, we expect to see higher member cost sharing and decreased ER utilization.
- Early claims data (July – September 2012) suggest that cost sharing has increased to over 5%, and ER use has declined.
- As of July 2012, City of Boston added the following benefits:
 - Enhanced smoking cessation benefit
 - Preventive care/screenings at \$0 copay, as per the Affordable Care Act (ACA)

Observations and Opportunities (2 of 2)

Findings: <i>Member Engagement</i>	Observations
<ul style="list-style-type: none"> 832 members were enrolled in specialty programs for Oncology, Rare Diseases, Chronic Kidney Disease, and Complex Chronic. 454 members were identified as high risk and enrolled in programs for common chronic disease (Asthma, Diabetes, Cardiac, and COPD). 	<ul style="list-style-type: none"> Apart from the Rare Diseases program, participation rates were similar to, or higher than, the Plan average. Participation rates were similar to, or higher than, the Plan average. Participation rates were far higher than the national average.
Findings: <i>Prevention and Wellness</i>	Observations
<ul style="list-style-type: none"> Nineteen members have completed the Health Questionnaire (HQ), fewer than last year (30) City of Boston had impressive HEDIS results for prevention and screening, far above the national benchmark HEDIS results for chronic condition monitoring were also above average, with the exception of asthma Harvard Pilgrim received fitness reimbursement requests for 11.3% of eligible City of Boston contracts 	<ul style="list-style-type: none"> Promote the HQ and push the message to members that they should have a copy of the results from their most recent check-up available when taking the HQ Continue messaging regarding prevention and wellness, and congratulate members for being proactive This percentage is slightly higher than the Plan average; consider sending a message via e-mail or employee newsletter to promote this benefit